

# Zehnder ComfoWell 220

Modular manifold for use with semi-rigid ductwork

Product data sheet

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# ComfoWell 220

The Zehnder ComfoWell 220 is a modular system consisting of attenuators, fine grade filters and active carbon filters all integrated for use with a rigid or semi-rigid ductwork approach. With a width of 220 mm it can be used for connecting up to 4 ComfoTube connections. The systems compact dimensions ensure good sound absorption and also make it easy to clean. Rigid pipe can be connected to the end plate securely by utilising the gasket seal connection. All other components are fitted using the locking slide connections to form an air tight and robust seal.

Noise reduction can be improved by combining two attenuators together. Filters are available in [ISO ePM1 >80% \(F7\)](#) or [ISO ePM1 >90% \(F9\)](#) grade in addition to an odour neutralising active carbon filter.



## Key Features

- Attenuator, fine grade filter, active carbon filter and manifold all combined into one space saving combination with the option to bespoke build exactly what's required.
- Easy to assemble thanks to its modular and compact design.

## Article Numbers

Description	Product Code
<b>Attenuator</b> <a href="#">Zehnder ComfoWell attenuator, CW-S 220</a>	990 323 500
<b>Manifold</b> <a href="#">Zehnder ComfoWell manifold box, CW-D 220</a>	990 323 530
<b>Filter Housing</b> <a href="#">Zehnder ComfoWell filter housing, CW-F 220</a>	990 323 550
<b>Mounting Plates</b> <a href="#">Zehnder ComfoWell mounting plate, CW-M 220, 4 x 75 mm connections</a>	990 323 610
<a href="#">Zehnder ComfoWell mounting plate, CW-M 220, 4 x 90 mm connections</a>	990 323 611
<b>End Plates</b> <a href="#">Zehnder ComfoWell end plate, CW-P 220, ø 125 mm</a>	990 323 510
<a href="#">Zehnder ComfoWell end plate, CW-P 220, ø 150 mm</a>	990 323 563
<b>Spacer Frame</b> <a href="#">Zehnder ComfoWell spacer frame, CW-DF 220</a>	990 323 537
<b>Mounting Set</b> <a href="#">Zehnder ComfoWell mounting set, CW-K 220, for Zehnder ComfoAir 160</a>	990 323 569
<a href="#">Zehnder ComfoWell connection plate, CW-P DK 220, for Zehnder ComfoAir 180 downward supply spigot</a>	990 323 577
<a href="#">Zehnder ComfoWell mounting set, CW-K 220, for Zehnder ComfoAir Flex 250/350</a>	990 323 710
<b>Filters</b> Filter for ComfoWell 220, CW-F9 220, <a href="#">ISO ePM1 &gt;90% (F9)</a> , 1 Piece	990 323 601
Filter for ComfoWell 220, CW-AC 220, active carbon filter, 1 Piece	990 323 602

## Technical Specification

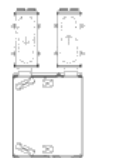


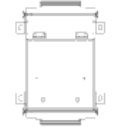
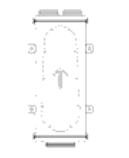
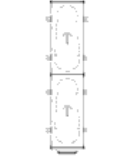

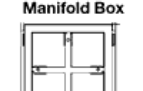
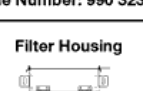
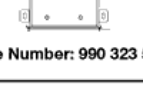
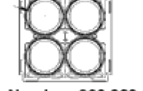
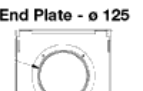
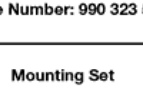
Housing	Galvanised sheet steel
Inner lining	Closed-cell melamine resin foam
Operating temperature range	-25 to +60°C
Recommended maximum air volume	44.4 l/s (160 m³/h) at normal ventilation level
Air tightness class to <a href="#">EN 1507:2006</a>	B
Air tightness class to <a href="#">EN 12237:2003</a>	B
Fire rating to <a href="#">EN 13501-1</a>	C

## Sound Data

Combination	Octave Band (Hz) Insertion Loss, dB							
	63	125	250	500	1000	2000	4000	8000
1 x Attenuator (CW-S 220) with 2 x 125 mm end plates (CW-P 220)	11.6	7.1	8.2	12.8	15.2	23.9	24.6	19.5
2 x Attenuator (CW-S 220) stacked with 2 x 125 mm end plates (CW-P 220)	11	11.4	16.1	27.2	25.2	36.6	37.9	27.2
1 x Attenuator (CW-S 220) with 1 x 125 mm end plates (CW-P 220) and 1 x 75 mm mounting plate (CW-M 220)	26.8	6.6	23.7	19.3	21.6	33.7	41.1	33.9

Acoustic performance measured according to [EN ISO 7235 \(pink noise\)](#)

## Example Connections

Combination Options	ComfoAir 160 right handed (factory setting) with mounting set, 2 x attenuators and 2 x 6 port ø 75mm mounting plates	Stand alone attenuator with 2 x ø 125mm end plates	Stand alone manifold with 1 x ø 125mm end plate and 4 x ø 75mm mounting plates	Stand alone filter housing with 2 x ø 125mm	Stand alone silencer and manifold combined with 1 x ø 125mm end plate and 4 x ø 75mm mounting plate	Stand alone 2 x attenuator with 1 x ø 125mm end plate and 4 x ø 75mm mounting plate
<b>Individual Components</b>						
<b>Silencer</b>  Article Number: 990 323 500	2 x Zehnder ComfoWell attenuator, CW-S 220	1 x Zehnder ComfoWell attenuator, CW-S 220	—	—	1 x Zehnder ComfoWell attenuator, CW-S 220	2 x Zehnder ComfoWell attenuator, CW-S 220
<b>Manifold Box</b>  Article Number: 990 323 530	—	—	1 x Zehnder ComfoWell manifold box, CW-D 220	—	—	—
<b>Filter Housing</b>  Article Number: 990 323 550	—	—	—	1 x Zehnder ComfoWell filter housing, CW-F 220	—	—
<b>Mounting Plate -ø 75</b>  Article Number: 990 323 610	2 x Zehnder ComfoWell mounting plate, CW-M 220, 4 x 75mm connections	—	1 x Zehnder ComfoWell mounting plate, CW-M 220, 4 x 75mm connections	—	1 x Zehnder ComfoWell mounting plate, CW-M 220, 4 x 75mm connections	1 x Zehnder ComfoWell mounting plate, CW-M 220, 4 x 75mm connections
<b>End Plate - ø 125</b>  Article Number: 990 323 510	—	2 x Zehnder ComfoWell end plate, CW-P 220, ø 125mm	1 x Zehnder ComfoWell end plate, CW-P 220, ø 125mm	2 x Zehnder ComfoWell end plate, CW-P 220, ø 125mm	1 x Zehnder ComfoWell end plate, CW-P 220, ø 125mm	1 x Zehnder ComfoWell end plate, CW-P 220, ø 125mm
<b>Mounting Set</b>  Article Number: 990 323 569	1 x Zehnder ComfoWell mounting set, CW-K 220, for Zehnder ComfoAir 160	—	—	—	—	—
<b>Filter</b>  Article Number: 990 323 601	—	—	—	1 x Filter for ComfoWell 220, CW-F (220, ISO ePM1 > 90% (F9), 1 piece	—	—

## Zehnder ComfoWell attenuator CW-S 220

Article number: 990 323 500

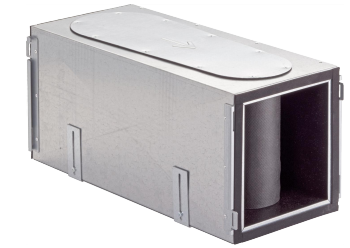
### Description

#### Attenuator:

Zehnder ComfoWell attenuator CW-S 220. Rectangular compact attenuator with highly efficient sound insulation combined with low pressure losses. The attenuator can be used individually or in combination with all ComfoWell components. The airtight connection between components is via a clamping strip. For cleaning purposes the sound absorbing element can be removed. Mounting on the wall or ceiling is done using the supplied fully adjustable installation mounts.

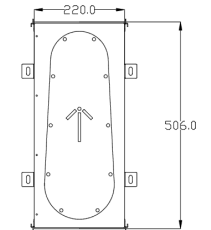
### Technical Specification

Height	506 mm
Width	236 mm
Depth	232.5 mm
Weight	5.1 kg

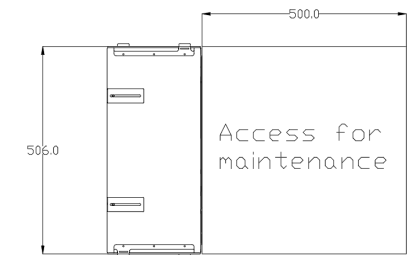


### Dimensions

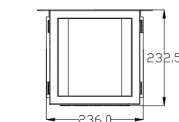
Front View



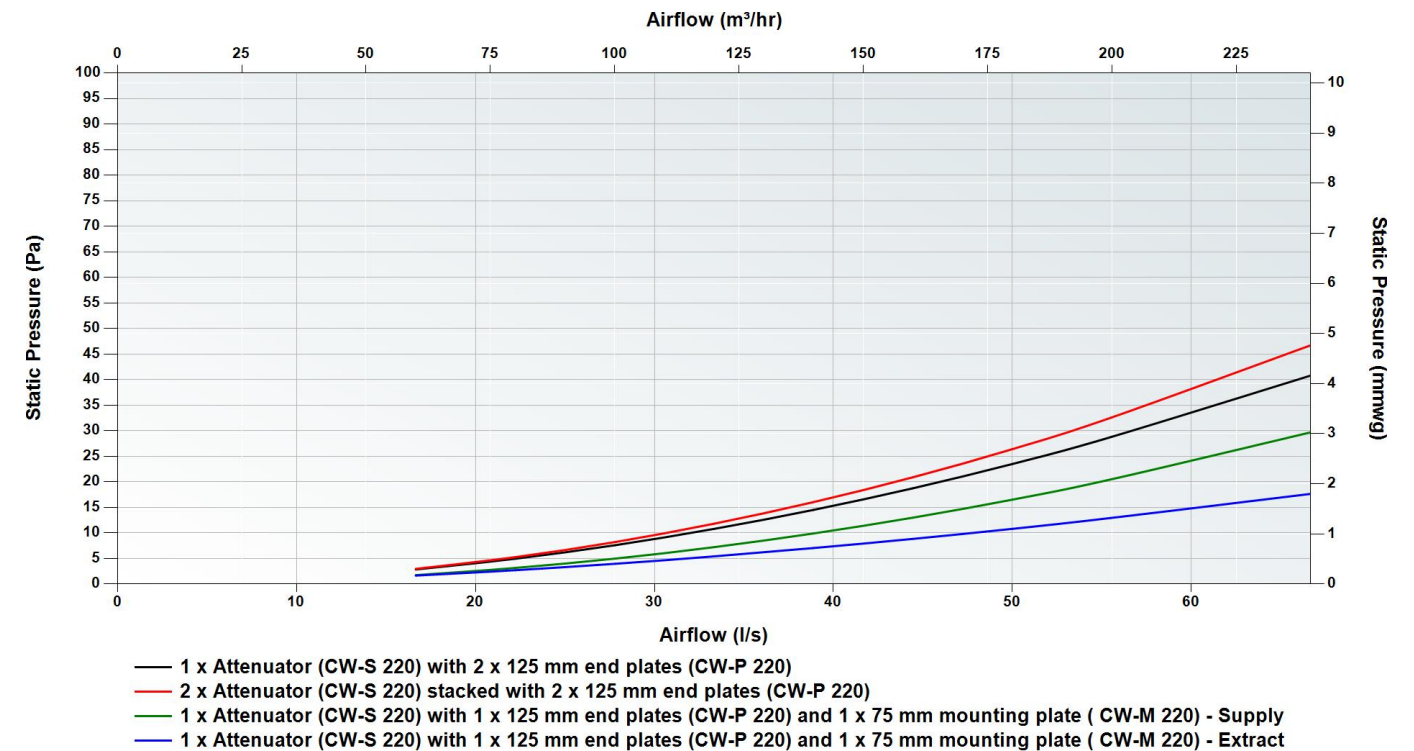
Side View



Top View



## Pressure Curve



### Zehnder ComfoWell manifold box CW-D 220

Article number: 990 323 530

#### Description

##### Manifold Box:

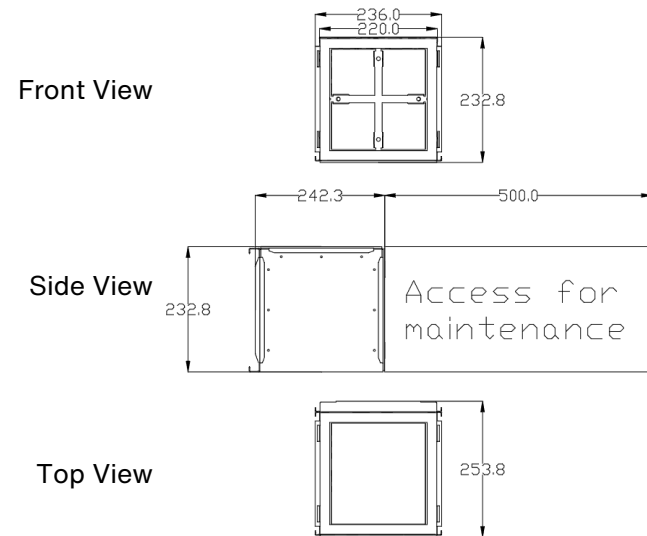
Zehnder ComfoWell manifold box CW-D 220. Rectangular compact design with closed pore internal lining. Suitable for use with the mounting plate for 4 x ComfoTube 75 mm connections or 4 x 90 mm connections. The mounting plate can be mounted on the top or side of the manifold box. The airtight connection between components is via a clamping strip. For cleaning purposes the manifold box side plate can be removed for easy access. Mounting on the wall or ceiling is done using the supplied fully adjustable installation mounts.

#### Technical Specification

Height	232.8 mm
Width	236 mm
Depth	253.8 mm
Weight	3.51 kg



#### Dimensions



### Zehnder ComfoWell filter housing CW-F 220

Article number: 990 323 550

#### Description

##### Filter Housing:

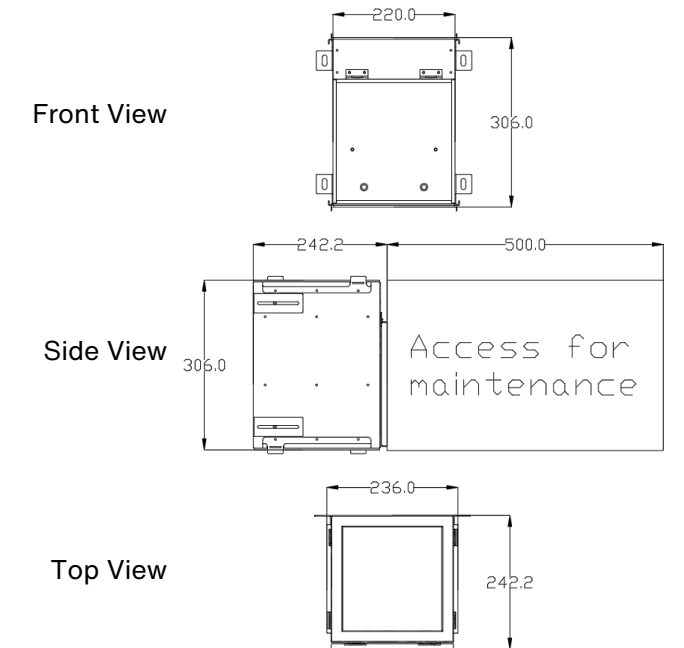
Zehnder ComfoWell filter housing CW-F 220. Rectangular compact design for use with a fine pollen filter graded ISO ePM1 >80% (F7), a fine dust filter graded ISO ePM1 >90% (F9) or an active carbon filter to neutralise odours in the supply air duct run. The filter elements are not included with the filter housing and need to be purchased separately, with only 1 filter per housing possible. The filter housing can be used individually or in combination with all ComfoWell components. The airtight connection between components is via a clamping strip. Mounting on the wall or ceiling is done using the supplied fully adjustable installation mounts.

#### Technical Specification

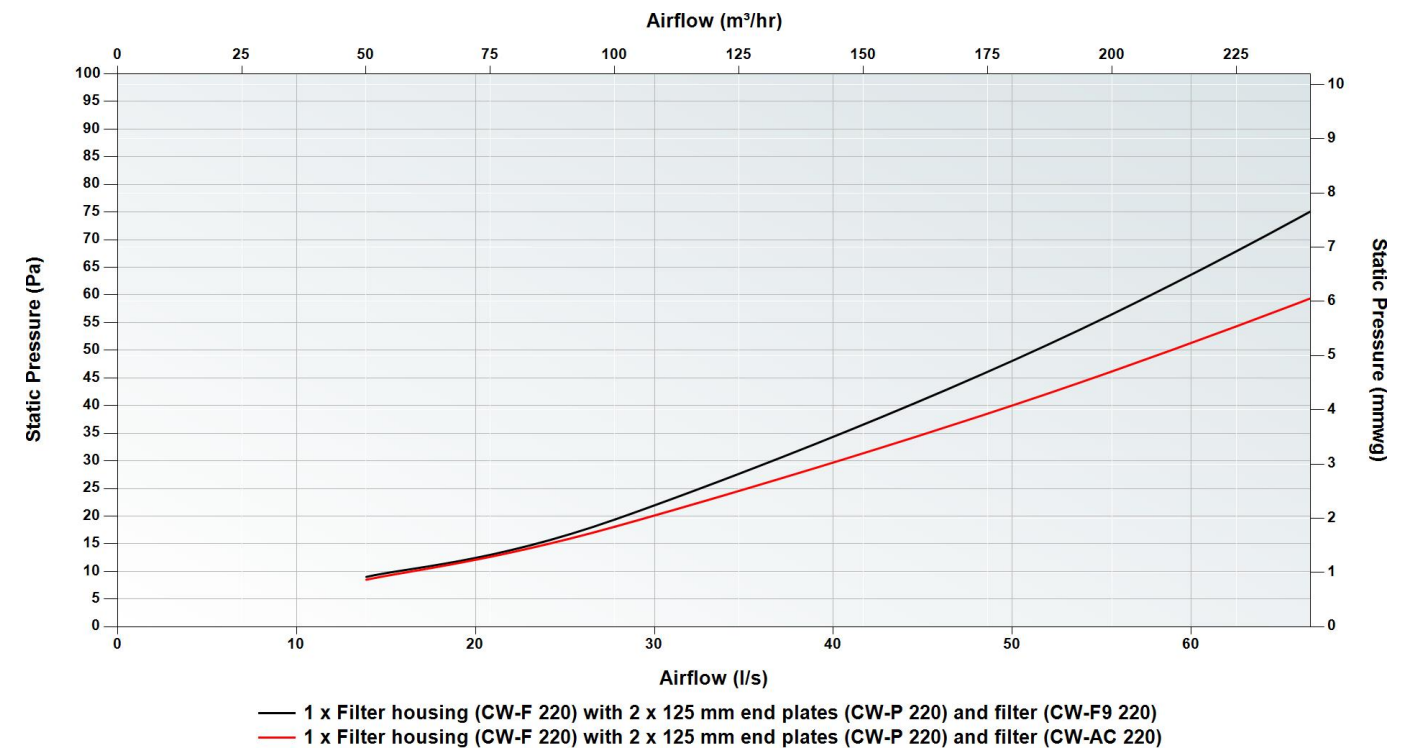
Height	306 mm
Width	236 mm
Depth	242.2 mm
Weight	
Housing	4.25 kg
CW-F7	0.4 kg
CW-F9	0.4 kg
CW-AC	0.66 kg



#### Dimensions



### Pressure Curve



### Zehnder ComfoWell mounting plate CW-M 220

Article number: 990 323 610 / 990 323 611

#### Description

##### Mounting Plate:

Zehnder ComfoWell mounting plate CW-M 220-4 x 75 or 90. Manifold mounting plate for connection of 4 x ComfoTube 75 mm or 90 mm semi-rigid ducting. The mounting plate includes a protective film and the necessary mounting accessories including locking slides.

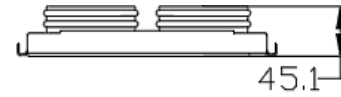
#### Technical Specification

Height	45.1 mm
Width	236 mm
Depth	230 mm
Weight	<0.73 kg

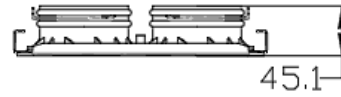


#### Dimensions

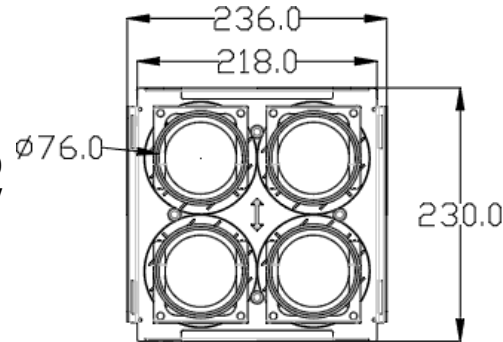
990 323 610  
Front View



990 323 610  
Side View



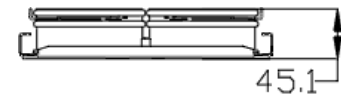
990 323 610  
Top View



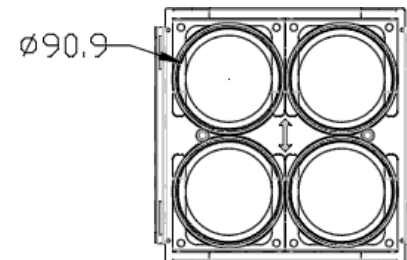
990 323 611  
Front View



990 323 611  
Side View



990 323 611  
Top View



### Zehnder ComfoWell end plate CW-P 220 - $\phi$ 125 / 150 mm

Article number: 990 323 510 / 990 323 563

#### Description

##### End Plate:

Zehnder ComfoWell end plate CW-P 220 - DN125 / DN150 (with centre connection) for the connection to the ComfoWell attenuator/manifold box or filter housing to the matching ducting size required. The end plate includes the necessary mounting accessories.

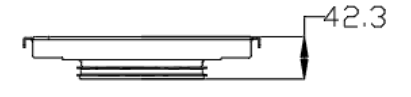
#### Technical Specification

Diameter	125 mm / 150 mm
Height	42.3 mm
Width	236 mm
Depth	230 mm
Weight	<0.73 kg

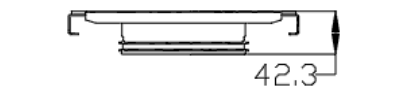


#### Dimensions

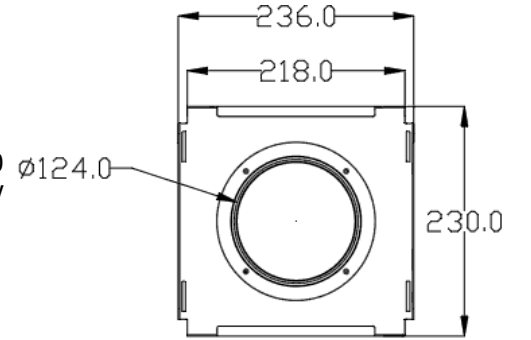
990 323 510  
Front View



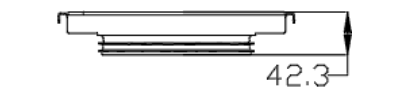
990 323 510  
Side View



990 323 510  
Top View



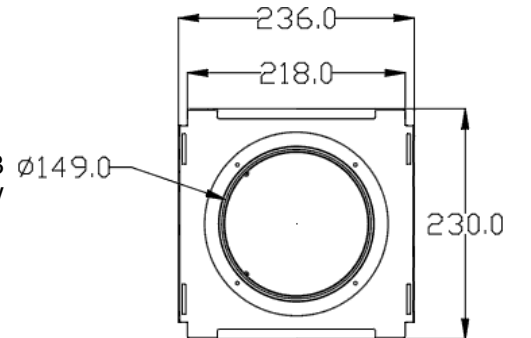
990 323 563  
Front View



990 323 563  
Side View



990 323 563  
Top View



### Zehnder ComfoWell spacer frame, CW-DF 220

Article number: 990 323 537

#### Description

##### Spacer Frame:

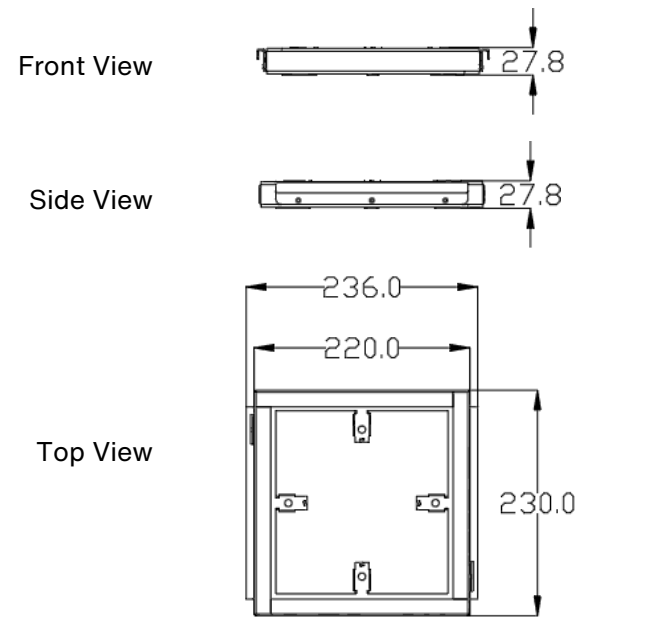
Zehnder ComfoWell spacer frame CW-DF220. Rectangular frame for use in the event of uneven surfaces when connecting components and mounting plate (concreted in place) are at 90 degrees. The spacer frame includes the necessary mounting accessories.

#### Technical Specification

Height	27.8 mm
Width	236 mm
Depth	230 mm
Weight	0.84 kg



#### Dimensions



### Zehnder ComfoWell mounting set, CW-K 220, for Zehnder ComfoAir 160

Article number: 990 323 569

#### Description

##### Mounting set:

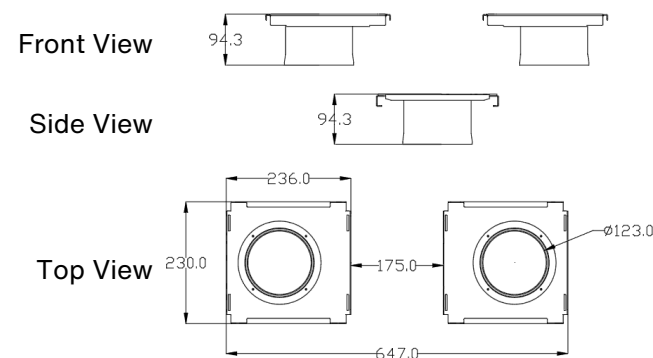
A range of special mounting sets are available for the Zehnder ComfoWell 220 for direct mounting to the ComfoAir 160 / ComfoAir Flex 250 / ComfoAir Flex 350 ventilation unit. The mounting set includes all the necessary accessories (screws, brackets and mounting brackets).

#### Technical Specification

Height	94.3 mm
Width	236 mm
Depth	230 mm
Weight	1.7 kg



#### Dimensions



### Zehnder ComfoWell connection plate, CW-P DK 220, for Zehnder ComfoAir 180 downward supply spigot

Article number: 990 323 577

#### Description

##### Mounting set:

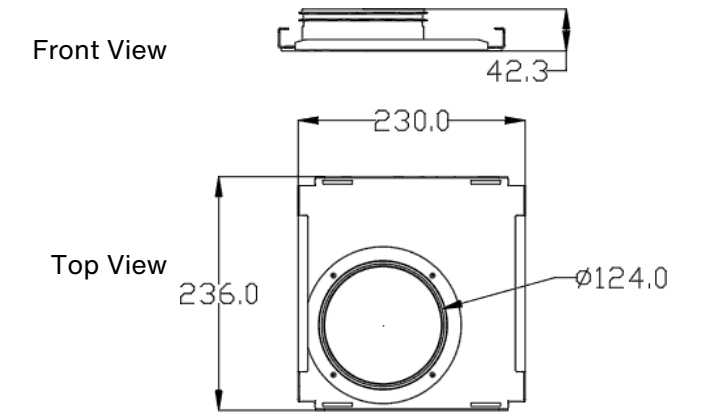
A range of special mounting sets are available for the Zehnder ComfoWell 220 for direct mounting to the ComfoAir 160 / ComfoAir Flex 250 / ComfoAir Flex 350 ventilation unit. The mounting set includes all the necessary accessories (screws, brackets and mounting brackets).

#### Technical Specification

Height	42.3 mm
Width	236 mm
Depth	230 mm
Weight	0.7 kg



#### Dimensions



### Zehnder ComfoWell mounting set, CW-K 220, for Zehnder ComfoAir Flex 250/350

Article number: 990 323 710

#### Description

##### Mounting set:

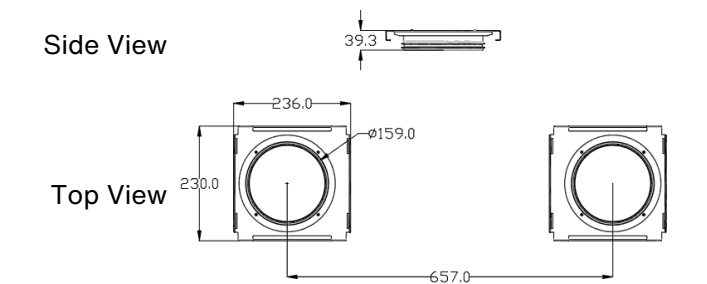
A range of special mounting sets are available for the Zehnder ComfoWell 220 for direct mounting to the ComfoAir 160 / ComfoAir Flex 250 / ComfoAir Flex 350 ventilation unit. The mounting set includes all the necessary accessories (screws, brackets and mounting brackets).

#### Technical Specification

Height	39.3 mm
Width	236 mm
Depth	230 mm
Weight	1.1 kg



#### Dimensions



## For use with

Our range of Comfowell units can be used in conjunction with our Zehnder ComfoTube  $\varnothing$  75 mm and  $\varnothing$  90 mm semi-rigid ductwork.



TO VIEW OUR COMFOTUBE INFORMATION

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## BIM/CAD Components

If you would like to download the BIM / CAD files for this or any other of our products then please visit our BIM library.

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[CLICK HERE](#)

## Installation Instructions

If you would like to download the installation files for this or any other of our products then please visit our download page by clicking the link below.

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## Consultant Specification

### Specification

The semi-rigid ductwork manifold shall be constructed of galvanised sheet steel with a closed-cell melamine resin foam inner lining to prevent dust collection and have a fire class C according to [EN 13501-1](#).

It shall be of modular construction with options to combine attenuators, manifold box, filter housing with [ISO ePM1 >80% \(F7\)](#), [ISO ePM1 >90% \(F9\)](#) or active carbon filters and end plates ranging from  $\varnothing$  125 mm to  $\varnothing$  200 mm.

It shall have the option of a mounting set for direct connection to the mechanical ventilation with heat recovery unit.

The components shall be tested to BS [EN 1507:2006](#) and BS [EN 12237:2003](#) for airtightness and have removable elements to provide access for cleaning.